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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,649	01/04/2007	Raiko Milanovic	0070996-000052	1499
21839 7590 01/05/2011 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			EXAMINER STEVENS, THOMAS H	
			ART UNIT 2121	PAPER NUMBER
			NOTIFICATION DATE 01/05/2011	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/590,649	Applicant(s) MILANOVIC ET AL.	
	Examiner THOMAS STEVENS	Art Unit 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-14,18 is/are rejected.
- 7) ☒ Claim(s) 3 and 15-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-18 were examined.

Section I: Reopening Prosecution

2. In view of the appeal brief filed on 10/14/2010, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options: (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or, (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2). Reopening is necessitated based on applicants' argument in the brief. Based on applicants' brief and interpretation, examiner has provided new art and looks forward to advancing prosecution.

Section II: Response to Arguments

102(e)

3. Applicants' arguments with respect to claim 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Section IV: Non Final Rejection

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1,4,5,6,7,8,9,10,12,13,14, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Balling (US Patent Application 2004/0186613; herein Balling).
Balling discloses a device for automating and/or controlling machine tools (abstract).

Claim 1. A process control system (automated control machines, paragraph 0006) comprising measurement devices (e.g., sensors, paragraphs 0021 and 0022) and actuators (paragraphs 0021 and 0022) wherein a) all the measurement devices (e.g., sensors, paragraphs 0021 and 0022) and actuators (paragraphs 0021 and 0022) contain means for information processing and for data interchange between the measurement devices (e.g., sensors, paragraphs 0021 and 0022) and actuators (paragraphs 0021 and 0022), b) all the measurement devices (e.g., sensors, paragraphs 0021 and 0022) and actuators (paragraphs 0021 and 0022) are connected by means for bidirectional data (paragraph 0021, information is bidirectional transmitted between the computer and sensors/actuator connected to machines 3a and 3b, also see paragraph

Art Unit: 2121

0022)interchange, and c) a of the measurement devices (e.g., sensors, paragraphs 0021 and 0022)and actuators (paragraphs 0021 and 0022) have means for data interchange with a service appliance (e.g., machines 3a and 3b, in paragraph 0022) which can be connected.

Claim 4. The process control system (automated control machines, paragraph 0006)as claimed in claim 1, wherein point-to-point links are produced as means for bidirectional data (paragraph 0021, information is bidirectional transmitted between the computer and sensors/actuator connected to machines 3a and 3b, also see paragraph 0022)interchange.

Claim 5. The process control system (automated control machines, paragraph 0006)as claimed in claim 1, wherein a bus system (element 2), to which all of the measurement devices (e.g., sensors, paragraphs 0021 and 0022)and actuators (paragraphs 0021 and 0022) are connected, is provided as the means for bidirectional data (paragraph 0021, information is bidirectional transmitted between the computer and sensors/actuator connected to machines 3a and 3b, also see paragraph 0022)interchange.

Claim 6. The process control system (automated control machines, paragraph 0006)as claimed in claim 1, wherein a laptop (e.g., handheld operating device, paragraph 0019) or a PDA is used as the service appliance (e.g., machines 3a and 3b, in paragraph 0022) which can be connected.

Claim 7. The process control system (automated control machines, paragraph 0006)as claimed in claim 1, wherein the measurement devices (e.g., sensors, paragraphs 0021

Art Unit: 2121

and 0022)and actuators (paragraphs 0021 and 0022) are designed to carry out plausibility checks and diagnoses.

Claim 8. The process control system (automated control machines, paragraph 0006)as claimed in claim 1, wherein the measurement devices (e.g., sensors, paragraphs 0021 and 0022)and actuators (paragraphs 0021 and 0022) are designed for preprocessing of recorded data.

Claim 9. A method for operation of a process control system (automated control machines, paragraph 0006)as claimed in claim 1, wherein data which has been recorded in measurement devices (e.g., sensors, paragraphs 0021 and 0022)of the system by sensors of the measurement devices (e.g., sensors, paragraphs 0021 and 0022)and has possibly been obtained by preprocessing is linked to data from other measurement devices, (e.g., sensors, paragraphs 0021 and 0022) and all of the data is stored (central computer, paragraph 0004) and is transmitted to respective other measurement devices (e.g., sensors, paragraphs 0021 and 0022)and to actuators (paragraphs 0021 and 0022), and data which has been called up from a service device which is connected to measurement devices (e.g., sensors, paragraphs 0021 and 0022)or actuators (paragraphs 0021 and 0022) is emitted.

Claim 10. The method as claimed in claim 9, wherein self-diagnoses are carried out in the components of the process control system, (automated control machines, paragraph 0006) whose results are likewise stored (central computer, paragraph 0004) such that

Art Unit: 2121

they can be called up by a service device.

Claim 12. The process control system (automated control machines, paragraph 0006)as claimed in claim 11, wherein point-to-point links are produced as means for bidirectional data (paragraph 0021, information is bidirectional transmitted between the computer and sensors/actuator connected to machines 3a and 3b, also see paragraph 0022)interchange.

Claim 13. The process control system (automated control machines, paragraph 0006)as claimed in claim 12, wherein a bus system (element 2), to which all of the measurement devices (e.g., sensors, paragraphs 0021 and 0022)and actuators (paragraphs 0021 and 0022) are connected, is provided as the means for bidirectional data (paragraph 0021, information is bidirectional transmitted between the computer and sensors/actuator connected to machines 3a and 3b, also see paragraph 0022)interchange.

Claim 14. The process control system (automated control machines, paragraph 0006)as claimed in claim 13, wherein a laptop (e.g., handheld operating device, paragraph 0019) or a PDA is used as the service appliance (e.g., machines 3a and 3b, in paragraph 0022) which can be connected.

Claim 18. A process control system, comprising: measurement devices (e.g., sensors, paragraphs 0021 and 0022) and actuators (paragraphs 0021 and 0022), each of which includes means for information processing and for data interchange between the measurement devices (e.g., sensors, paragraphs 0021 and 0022) and actuators (paragraphs 0021 and 0022); means for interconnecting the measurement devices (e.g., sensors, paragraphs 0021 and 0022) and actuators (paragraphs 0021 and 0022) for bidirectional data (paragraph 0021, information is bidirectional transmitted between the computer and sensors/actuator connected to machines 3a and 3b, also see paragraph 0022) interchange; and means, provided with multiple ones of the measurement devices (e.g., sensors, paragraphs 0021 and 0022) and actuators (paragraphs 0021 and 0022), for data interchange with a service appliance (e.g., machines 3a and 3b, in paragraph 0022) which can be connected.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2121

10. Claims 2 rejected under 35 U.S.C. 103(a) as being unpatentable over Balling in view of Kirkpatrick et al.,(US Patent 6,574,515; herein Kirkpatrick).

While Balling teaches most of the limitations in claim 1, Balling fails to teach a microcomputer. Kirkpatrick teaches a microcomputer (column 3, lines 45-50).

Kirkpatrick is analogous in the art of two way data communication between control based devices and is advantageous in providing real-time indications at certain processing locations in order to maintain proper material processing.

Thus, it would have been obvious to modify the bidirectional data between devices of Balling by including the microcomputer feature of Kirkpatrick. This modification would have been obvious since Kirkpatrick teaches a method that removes ground loop errors that currently limit multiple input transmitters (Kirkpatrick column 3, lines 33-35).

Allowable Subject Matter

11. Claims 3 and 15-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Art Unit: 2121

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Tom Stevens whose telephone number is 571-272-3715.

If attempts to reach the examiner by telephone are unsuccessful, please contact examiner's supervisor Mr. Albert Decady (571-272-3819). The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Answers to questions regarding access to the Private PAIR system, contact the Electronic Business Center (EBC) (toll-free (866-217-9197)).

/Thomas H. Stevens/

Examiner, Art Unit 2121

/ALBERT DECADY/

Supervisory Patent Examiner, Art Unit 2121

Application/Control Number: 10/590,649
Art Unit: 2121

Page 11